WHAT IS CLAIMED IS:

1. An alignment system for aligning a reticle having a pattern and an alignment mark with a photosensitive substrate to which the pattern of the reticle is to be transferred, said alignment system comprising:

a movable substrate stage for holding the substrate; and

a light-transparent plate having a mark for relative positioning with respect to at least one of the reticle and said substrate stage, wherein positioning of at least one of the reticle and said substrate stage is performed on the basis of the mark provided on said light-transparent plate.

2. An alignment system according to Claim 1, further comprising (i) first and second reference marks provided on said substrate stage, (ii) first mark detecting means for optically detecting a mark on the substrate without through any of said light-transparent plane and the substrate, and (iii) second mark detecting means for optically detecting a mark provided on at least one of the reticle, said substrate stage, said light-transparent plate and the substrate.

3. An alignment system according to Claim 2,

wherein marks of the reticle and said light-transparent plate can be detected through said second mark detecting means, and wherein on the basis of said detection the reticle and said light-transparent plate can be aligned with each other.

4. An alignment system according to Claim 2, wherein the second reference mark and the mark of said light-transparent mark can be detected through said second mark detecting means, wherein the first reference mark can be detected through said first mark detecting means, and wherein, on the basis of these detections, a relative positional deviation between a detection center of said first mark detecting means and the mark of said light-transparent plate can be detected.

5. An alignment system according to Claim 2, wherein said second mark detecting means is operable to move said second mark detecting means and said substrate stage to a position where the mark of said light-transparent plate and the second reference mark can be detected through said second mark detecting means, and wherein information related to running tilt of said substrate stage with respect to said light-transparent plate can be detected on the basis of detection of the second reference mark and the mark of

said light-transparent plate made through said second mark detecting means after the movement.

6. An alignment system according to Claim 2, wherein said light-transparent plate comprises a separate structure of a first portion for bearing a mark thereon and a second portion for receiving exposure light.

7. An alignment system according to Claim 2, further comprising a second light-transparent plate of a thickness corresponding to the thickness of the reticle, wherein said second light-transparent plate is inserted to a path of detection light of said second mark detecting means when the reticle is not loaded.

8. An alignment system according to Claim 2, wherein said second mark detecting means include a correcting lens which is movable, when the reticle is not loaded, to a position for correcting an optical influence due to absence of the reticle.

9. An alignment system for aligning a reticle having a pattern and an alignment mark with a photosensitive substrate to which the pattern of the reticle is to be transferred, said alignment system

comprising:

a movable substrate stage for holding the substrate; and

a light-transparent plate having a mark for relative positioning with respect to at least one of the reticle and said substrate stage;

first and second reference marks provided on said substrate stage;

first mark detecting means for optically detecting a mark on the substrate without through any of said light-transparent plate and the reticle; and

second mark detecting means for optically detecting a mark provided on at least one of the reticle, said substrate stage, said light-transparent plate and the substrate;

wherein said second mark detecting means is operable to detect relative positional information between the mark of said light-transparent plate and the second reference mark, while said first mark detecting means is operable to detect relative positional information between the first reference mark and a detection center of said first mark detecting means, on the basis of which relative positional information between the mark of said light-transparent plate and the detection center of said first mark detecting means can be detected; and

wherein alignment between the reticle and the substrate can be performed on the basis of the relative positional information between the mark of said light-transparent plate and the detection center of said first mark detecting means.

10. An exposure apparatus usable with a reticle having a pattern and an alignment mark and a photosensitive substrate, for transferring the pattern of the reticle onto the substrate, said apparatus comprising:

a projection optical system for projecting the pattern of the reticle onto the substrate; and

a light-transparent plate provided between said projection optical system and a position where the reticle is to be disposed, said light-transparent plate having an alignment mark to be used for relative alignment of the reticle and the substrate.

11. An apparatus according to Claim 10, further comprising (i) a movable substrate stage for holding the substrate, (ii) first and second reference marks provided on said substrate stage, (iii) first mark detecting means for optically detecting a mark on the substrate without through any of said light-transparent plate and the reticle, and (iv) second mark detecting means for optically detecting a mark provided on at least one of the reticle, said

substrate stage, said light-transparent plate and the substrate, wherein said second mark detecting means is operable to detect relative positional information between the mark of said light-transparent plate and the second reference mark, while said first mark detecting means is operable to detect relative positional information between the first reference mark and a detection center of said first mark detecting means, on the basis of which relative positional information between the mark of said light-transparent plate and the detection center of said first mark detecting means can be detected, and wherein alignment between the reticle and the substrate can be performed on the basis of the relative positional information between the mark of said light-transparent plate and the detection center of said first mark detecting means.

12. A device manufacturing method, comprising the steps of:

detecting relative positional information between a detection center of first mark detecting means and a first reference mark provided on a substrate stage for holding a photosensitive substrate;

detecting relative positional information between a second reference mark provided on the substrate stage and a mark provided on a light-transparent plate, disposed between a projection optical system and a position where a reticle is to be disposed;

detecting relative positional information between the mark on the light-transparent plate and a detection center of the first mark detecting means;

aligning the reticle and the substrate on the basis of the relative positional information between the mark of the light-transparent plate and the detection center of the first mark detecting means;

transferring a pattern of the reticle onto the substrate, aligned with each other, through the projection optical system.